

US EPA RECORDS CENTER REGION 5



466396

Monthly Oversight Report 48  
ACS NPL Site  
Griffith, Indiana  
November 27, 2004 - December 31, 2004



# BLACK & VEATCH

101 N. Wacker Drive  
Suite 1100  
Chicago, Illinois 60606-7302

Tel: (312) 346-3775  
Fax: (312) 346-4781

Black & Veatch Special Projects Corp.

USEPA/RAC VII  
American Chemical Services RAO (057-ROBF-05J7)

BVSPC Project 46526  
BVSPC File C.3  
January 14, 2005

Mr. Kevin Adler  
U.S. Environmental Protection Agency  
77 W. Jackson Boulevard (SR-6J)  
Chicago, Illinois 60604-3590

Subject: Monthly Oversight Summary Report  
No. 48 for December 2004

Dear Mr. Adler:

Enclosed is the Monthly Oversight Summary Report No. 48 for December 2004 for the American Chemical Services Superfund Site in Griffith, Indiana.

If you have any questions, please call (312-683-7856) or email ([campbellm@bv.com](mailto:campbellm@bv.com)).

Sincerely,

BLACK & VEATCH Special Projects Corp.

Larry M. Campbell, P.E.  
Site Manager

Enclosure

t:\projects\lacs-raos\corresp\let-059.doc

**Monthly Oversight Summary Report No. 48**  
**ACS Superfund Site WA57, 46526.238**

**Reporting Period:** Month of December (November 27 - December 31, 2004).

**BVSPC O/S Dates:** December 7 and 23, 2004.

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	2	Respondent's General Contractor
Indiana Department of Environmental Management	1	State Regulatory Agency
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Austgen	1	General Contractor
Eagle Environmental Services	3	Speciality Contractor

### **Construction Activities**

#### **Major Activities:**

- Montgomery Watson Harza continued operating the groundwater treatment plant, the in-situ soil vapor extraction systems, and the air sparge systems.
- Eagle Environmental Services removed sludge and an angle iron from the activated sludge clarifier that had impeded the rotation of the sludge rake. Also removed sludge from tank T2.
- Montgomery Watson Harza and Austgen removed sludge from lamella clarifier ME5.
- Microbac (formerly Simalabs) collected samples from the groundwater treatment plant for routine process monitoring.
- Montgomery Watson Harza held construction coordination meetings at the site on December 9 and 23, 2004.

#### **Activities Performed:**

Montgomery Watson Harza (MWH) reported that it continued to operate the groundwater treatment plant (GWTP) at 25 gpm, except during the period December 6-9 when it was off-line because of problems with the activated sludge clarifier rake. MWH reported that water was pumped to the GWTP from all available sources. Microbac (formerly Simalabs) collected samples from the GWTP for routine process monitoring.

MWH reported on December 6 that the sludge rake in the activated sludge clarifier had stopped rotating. Eagle Environmental Services mobilized to the site on December 7 to pump out the sludge from the clarifier and investigate the rake rotation problem. On December 9, Eagle performed a permitted confined space entry into the clarifier to investigate the cause of the rake rotation problem.

Eagle found a foot-long piece of angle iron lodged under the rake, preventing its rotation. MWH reported that the obstruction was removed, and the sludge rake and GWTP were reactivated with no continuing problems. MWH reported that it did not identify the source of the angle iron. Also, on December 7, Eagle performed a permitted confined space entry into tank T2 to remove sludge from that tank. Both confined space entries were performed with personnel wearing respirators and VOC monitoring using a photo ionization detector (PID). Eagle demobilized from the site on December 9.

While the GWTP was off-line, MWH and Austgen removed the sludge from the lamella clarifier ME5 on December 7.

MWH continued to operate the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) and Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) systems, processing vapors through thermal oxidizers 1 and 2. Vapors from the ONCA SBPA ISVE system were processed through thermal oxidizer 1 (thermox 1), and those from the OFCA ISVE system were processed through thermox 2. MWH shut down the ISVE systems during the period December 7-9 to prevent exposure of Eagle personnel to the effluent plume from the thermox units.

MWH reported that it was pulling vapors from 28 OFCA ISVE wells and that the two OFCA blowers were pumping vapors at 2,000 cubic feet per minute (cfm) back to thermox 2. MWH reported that it was pulling vapors from 14<sup>1</sup> ONCA SBPA ISVE wells, although significant flow was observed in only eight (five last month) of these activated wells. This system continues to operate at 1,000 cfm (with zero ambient air), pumping vapors back to thermox 1. MWH is considering activating more or a different pattern of SVE wells. MWH reported that it has not pumped product from the ONCA SBPA ISVE wells for a few months. MWH will prepare a product removal pumping plan/schedule.

MWH reported that the air sparge systems began operation on December 2 in both the OFCA and the ONCA SBPA. All installed air sparge points have been activated, and no problems were encountered.

MWH reported that it had received permission from Onyx to dispose of the lower aquifer soil cuttings together with the sludge from the GWTP.

MWH reported that additional fence stanchions had been delivered to the site and that it planned to pour cement grout into the bases of the yellow chain fence stanchions to increase their stability. The fencing would then be installed on the SBPA cover.

MWH reported that it measured groundwater levels in wells at the site on December 21. Water levels in the SBPA continued to be higher than desired, possibly impacting the vapor flow from ISVE wells.

---

<sup>1</sup>Previous reports had incorrectly identified that vapors were being pulled from 12 SBPA ISVE wells. Actually, vapors have been pulled from 14 SBPA ISVE wells for a number of months.

MWH reported that it had contacted the owner of the 1002 Reder Road residence and informed him of the March 2005 date of the second round of ChemOx injections.

MWH reported that the results of the residential well sampling in September 2004 identified trace amounts of DDT in one well. EPA suggested and MWH agreed to resample this well in January 2005.

MWH and Black & Veatch Special Projects Corp. (BVSPC) personnel met on December 23 with Howard Anderson and Donna Gonzalez, residents living less than a mile west of the GWTP, regarding the “whining” noise coming from the GWTP. Concluded the noise was probably that from the external air blowers. MWH agreed to assess acoustical containment of these blowers to reduce the noise and to inform the residents of its plans.

MWH held construction coordination meetings at the site on December 9 and 23, 2004.

Attached are BVSPC weekly reports No. 196 through 200, correspondence, log book notes, and photographs of the daily activities. BVSPC’s crew conducted oversight of the major field activities on portions of 2 days (December 7 and 23, 2004). BVSPC’s crew attended the construction coordination meetings on December 9 (via telephone) and 23 (at the site).

**Topics of Concern:** None

**Concern Resolution:** MWH met with local residents regarding the “whining” noise coming from the GWTP and agreed to investigate methods to minimize the off-site noise level.

**Upcoming Activities:**

- MWH to continue proving out the ONCA SBPA ISVE system wells.
- MWH to continue operating the GWTP, the OFCA and ONCA SBPA ISVE systems, and the air sparge systems.
- MWH to assess results of final laboratory testing of cores of the SBPA final asphalt cover.
- MWH to complete fencing of the SBPA final cover.
- MWH to collect additional soil gas samples to assess possible soil vapor intrusion into the house basement resulting from the smear zone in the South Area plume.
- MWH to reassess its approach to completing the lower aquifer investigation.

Signature: Larry Campbell

Date: January 4, 2005

*t:\projects\acs-raos\osr\2004\12\MO48.wpd*

**Weekly Oversight Summary Report No. 196**  
**ACS Superfund Site WA57, 46526.238**

**Reporting Period:** Week of November 29, 2004.

**BVSPC O/S Dates:** Cancelled because of limited site activities.

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	1	Respondent's General Contractor
Austgen	1	General Contractor

**Construction Activities**

**Major Activities:**

- Montgomery Watson Harza continued operating the groundwater treatment plant and the in-situ soil vapor extraction systems.

**Activities Performed:**

Montgomery Watson Harza (MWH) reported that it continued to operate the groundwater treatment plant (GWTP) at 25 gpm. After replacing fuses and resetting circuit breakers following the power failure on the evening of November 25, the plant was brought back online on November 27. MWH reported that water is being pumped to the GWTP from all available sources.

MWH continued to operate the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) and Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) systems, processing vapors through thermal oxidizers 1 and 2. Vapors from the ONCA SBPA ISVE system were processed through thermal oxidizer 1 (thermox 1), and those from the OFCA ISVE system were processed through thermox 2.

MWH reported that it was pulling vapors from 28 OFCA ISVE wells and that the two OFCA blowers are currently pumping vapors at 2,000 cubic feet per minute (cfm) back to thermox 2. MWH reported that it was pulling vapors from 14<sup>1</sup> ONCA SBPA ISVE wells, although significant flow was observed in only five of these activated wells. This system continues to operate at 1,000 cfm (with zero ambient air), pumping vapors back to thermox 1.

MWH reported that the air sparge systems were turned on December 2 in both the OFCA and ONCA SBPA. All installed air sparge points have been activated and no problems were encountered.

**Topics of Concern:** None.

---

<sup>1</sup>Previous reports had incorrectly identified that vapors were being pulled from 12 SBPA ISVE wells. Actually, vapors have been pulled from 14 SBPA ISVE wells for a number of months.

**Concern Resolution:** None.

**Upcoming Activities:**

- MWH to continue proving out the ONCA SBPA ISVE system wells.
- MWH to continue operating the GWTP and the OFCA and ONCA SBPA ISVE systems.
- MWH to assess results of final laboratory testing of cores of the SBPA final asphalt cover.
- MWH to complete fencing of the SBPA final cover.
- MWH to collect additional soil gas samples to assess possible soil vapor intrusion into the house basement resulting from the smear zone in the South Area plume.
- MWH to reassess its approach to completing the lower aquifer investigation.
- MWH to contact local resident regarding “whining” noise from the treatment system.
- MWH to measure site water levels onsite and in monitoring wells.

Signature: Larry Campbell

Date: December 8, 2004

*t:\projects\acs-raos\osr\2004\12\1129#196.wpd*

**Weekly Oversight Summary Report No. 197**  
**ACS Superfund Site WA57, 46526.238**

**Reporting Period:** Week of December 6, 2004.

**BVSPC O/S Dates:** December 7, 2004 (Mr. Campbell).

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	1	Respondent's General Contractor
Indiana Department of Environmental Management	1	State Regulatory Agency
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Austgen	1	General Contractor
Eagle Environmental Services	3	Speciality Contractor

**Construction Activities**

**Major Activities:**

- Montgomery Watson Harza continued operating the groundwater treatment plant and the in-situ soil vapor extraction systems.
- Eagle Environmental Services removed sludge and an angle iron from the activated sludge clarifier that had impeded the rotation of the sludge rake. Also removed sludge from tank T2.
- Montgomery Watson Harza and Austgen removed sludge from lamella clarifier ME5.
- Montgomery Watson Harza conducted a construction coordination meeting at the site on December 9.

**Activities Performed:**

Montgomery Watson Harza (MWH) reported that it continued to operate the groundwater treatment plant (GWTP) at 25 gpm, except during the period December 6-9 when it was off-line because of problems with the activated sludge clarifier rake. MWH reported that water was pumped to the GWTP from all available sources.

MWH reported on December 6 that the sludge rake in the activated sludge clarifier had stopped rotating. Eagle Environmental Services mobilized to the site on December 7 to pump out the sludge from the clarifier and investigate the rake rotation problem. On December 9, Eagle performed a permitted confined space entry into the clarifier to investigate the cause of the rake rotation problem. Eagle found a foot-long piece of angle iron lodged under the rake, preventing its rotation. MWH reported that the obstruction was removed, and the sludge rake and GWTP were reactivated with no continuing problems. MWH reported that it did not identify the source of the angle iron. Also, on December 7, Eagle performed a permitted confined space entry into tank T2 to remove sludge from



that tank. Both confined space entries were performed with personnel wearing respirators and VOC monitoring using a photo ionization detector (PID). Eagle demobilized from the site on December 9.

While the GWTP was off-line, MWH and Austgen removed the sludge from the lamella clarifier ME5 on December 7.

MWH continued to operate the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) and Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) systems, processing vapors through thermal oxidizers 1 and 2. Vapors from the ONCA SBPA ISVE system were processed through thermal oxidizer 1 (thermox 1), and those from the OFCA ISVE system were processed through thermox 2. MWH shut down the ISVE systems during the period December 7-9 to prevent exposure of Eagle personnel to the effluent plume from the thermox units.

MWH reported that it was pulling vapors from 28 OFCA ISVE wells and that the two OFCA blowers are currently pumping vapors at 2,000 cubic feet per minute (cfm) back to thermox 2. MWH reported that it was pulling vapors from 14<sup>1</sup> ONCA SBPA ISVE wells, although significant flow was observed in only five of these activated wells. This system continues to operate at 1,000 cfm (with zero ambient air), pumping vapors back to thermox 1.

MWH reported that the air sparge systems continued to operate satisfactorily.

MWH reported that it had received permission from Onyx to dispose of the lower aquifer soil cuttings together with the sludge from the GWTP.

MWH held a construction coordination meeting at the site on December 9, 2004. Black & Veatch Special Projects Corp. attended this meeting via telephone.

**Topics of Concern:** None.

**Concern Resolution:** None.

**Upcoming Activities:**

- MWH to continue proving out the ONCA SBPA ISVE system wells.
- MWH to continue operating the GWTP and the OFCA and ONCA SBPA ISVE systems.
- MWH to assess results of final laboratory testing of cores of the SBPA final asphalt cover.
- MWH to complete fencing of the SBPA final cover.
- MWH to collect additional soil gas samples to assess possible soil vapor intrusion into the house basement resulting from the smear zone in the South Area plume.
- MWH to reassess its approach to completing the lower aquifer investigation.
- MWH to contact local resident regarding “whining” noise from the treatment system.

---

<sup>1</sup>Previous reports had incorrectly identified that vapors were being pulled from 12 SBPA ISVE wells. Actually, vapors have been pulled from 14 SBPA ISVE wells for a number of months.

- MWH to measure site water levels onsite and in monitoring wells.

Signature: Larry Campbell

Date: December 15, 2004

*t:\projects\acs-raos\osr\2004\12\1206#197.wpd*

**MWH**

**WEEKLY CONSTRUCTION MEETING MINUTES  
FOR DECEMBER 9, 2004 MEETING  
AMERICAN CHEMICAL SERVICE, NPL SITE  
GRIFFITH, INDIANA**

**MEETING DATE:** Thursday, December 9, 2004

**MEETING TIME:** 10:00 AM

**MEETING LOCATION:** MWH Chicago Office

**ATTENDEES:** Prabhakar Kasarabada – IDEM  
Lee Orosz – MWH  
Rob Adams – MWH (via telephone)  
Kevin Adler – U.S. EPA (via telephone)  
Larry Campbell – BVSPC (via telephone)  
Matt Mesarch – MWH (via telephone)  
Chad Smith – MWH (via telephone)  
Peter Vagt – MWH (via telephone)

**TOPICS**

Health and Safety Summary

There have been no health and safety issues since the last meeting on October 28th.

Austgen Electric, Environmental Field Services, Mompar Insulation, and Eagle Environmental were on site in the past two weeks and had no health and safety incidents. On December 9th, Eagle Environmental conducted a confined space entry to clean out tank T-2 and the activated sludge clarifier. The work was done in respirators and a PID was used to monitor for VOCs per the site's confined space entry procedures. No PID hits were recorded during clean out activities.

Groundwater Treatment Plant (GWTP) Status

The GWTP is presently operating at 25 gallons per minute (gpm).

On the evening of November 25th the GWTP shut down due to a loss of electrical power. As a result of the power outage, numerous fuses were blown and have been replaced. The plant was brought back online on November 27th. Mr. Campbell asked whether the GWTP adequately alerts MWH staff when the plant shuts down. Mr. Adams indicated that MWH would examine their automated system and address this issue at the next meeting.

On December 6th Mr. Orosz observed that the center sludge rake in the activated sludge clarifier was not moving. The GWTP was taken offline and the liquid in the clarifier was pumped down on December 7th and 8th to allow for inspection of the rake. The ISVE system was also taken offline as a precaution to prevent worker exposure to the effluent plume from the scrubber stack while working on top of the activated sludge plant. On December 9th MWH discovered that a piece of angle iron had become lodged in the rake assembly preventing it from functioning properly. The obstruction was removed. MWH is currently evaluating whether the rake assembly will function now that the obstruction has been removed.

#### Off-Site Area/SBPA ISVE Systems

The Off-Site ISVE system is currently operating with a vapor collection rate of approximately 2,000 cubic feet per minute (CFM). On November 23rd, Mompar Insulation was onsite to install insulation for the new blower shed in the Off-Site Area. On November 24th, an additional 14 ISVE wells were activated in the Off-Site Area, bringing the total to 28. The additional wells were: SVE-1, SVE-7, SVE-8, SVE-9, SVE-14, SVE-15, SVE-18, SVE-21, SVE-27, SVE-30, SVE-31, SVE-33, SVE-36, and SVE-37. Flow immediately occurred in 11 of the 14 wells and was impending in the other 3 (i.e., the Magnehelic gauge was "fluttering" at zero).

The SBPA ISVE system is currently operating with a vapor collection rate of approximately 1,000 cubic feet per minute (CFM). There were no changes in the SBPA ISVE system wells. However, in the most recent monitoring event, significant flow was only observed in five of the operating wells (flow was observed in 9 wells in the previous month). The water levels in numerous wells were higher than in the previous month, which may have contributed to the reduced flow readings.

MWH is now operating the SBPA ISVE system with zero ambient air and may increase the number of wells in operation or operate different wells. This decision will be contingent upon the results of the next monitoring event. Mr. Campbell asked whether MWH has pumped product from any wells in the past month. Mr. Orosz indicated that no pumping had taken place within the past two months. Product levels will be evaluated in these wells during the next ISVE monitoring event to determine whether additional product recovery should be performed.

On December 2nd the air sparge system was turned on. All air sparge points were activated in both the Off-Site Area and SBPA.

On December 6th, both ISVE systems were taken offline while maintenance was being performed on the activated sludge clarifier. As of December 9th, the thermal oxidizers for both systems were in a "hot idle" mode and ready to resume operation once the maintenance has been completed.

#### SBPA Final Cover

MWH has finished a plan for expanding the yellow fencing system in the SBPA. MWH will pour concrete into the bases of the yellow fence posts once additional fence posts are delivered to the site to add stability and provide a stronger fencing system. MWH continues to evaluate the potential to expand the extents of the fence limits.

MWH anticipates submitting the SBPA Final Cover Construction Completion Report in January 2005.

#### Lower Aquifer Investigation

MWH is currently validating the analytical results from the Lower Aquifer Investigation. A report detailing the findings of this investigation and proposing an additional follow-up investigation is anticipated to be submitted in January 2005.

MWH also contacted Onyx in Port Arthur, Texas, regarding disposal of soil cuttings derived from this investigation. They indicated that the disposal permit would allow MWH to add all of the soil cuttings to the filter cake roll-off box for disposal. Consequently, the soil cuttings will not remain onsite past 90 days as previously expected.

### Chemical Oxidation Treatment

MWH has received the analytical results from the post-application monitoring event. The results indicated general decreases in contaminant concentrations in both soil and groundwater. For example, at groundwater monitoring location TW01 the gasoline range organic compound (GRO) concentration decreased from 180,000 to 39,000 ug/l. At soil location 3, the diesel range organic compound (DRO) concentration decreased from 4,700,000 to 540,000 ug/kg. A second full-scale application is planned for March 2005 instead of February 2005, as previously planned. The injection process does not work well under freezing conditions commonly encountered in February.

MWH is evaluating the results of the soil vapor investigation and will propose a follow-up investigation. Mr. Kasarabada asked whether the residence at the corner of Colfax Avenue and Reder Road included a basement. MWH indicated that it did.

### Groundwater and Residential Well Sampling

MWH has evaluated the results from the groundwater sampling activities completed in September 2004. The results were consistent with those of previous sampling events. In the residential well samples there were trace levels of VOCs detected. However, these do not appear to be related to site impacts. Mr. Adler is preparing letters to each resident summarizing the results of the residential well sampling. The next sampling event is scheduled for March 2005.

### Look Ahead Schedule

December 10, 2004 through December 23, 2004	<ul style="list-style-type: none"><li>• Operate and maintain the GWTP/BWES/PGCS (on-going)</li><li>• Operate and maintain the ISVE (on-going)</li><li>• Collect site water levels (week of December 20th)</li><li>• Collect water levels in PSVP monitoring wells (week of December 20th)</li><li>• Pour concrete into base of yellow fence posts (TBD)</li></ul>
Health and Safety Items to Monitor	<ul style="list-style-type: none"><li>• Routine daily tailgate health and safety meetings for all work activities</li><li>• Continued air monitoring in GWTP</li><li>• Monitor areas for icy conditions and apply salt where necessary</li><li>• Monitor weather conditions in advance of work scheduled outdoors so that workers can dress appropriately</li></ul>

Next Construction Meeting – Thursday, December 23, 2004, 10 AM.

MBM/ia/jmf

J:\209\1501 ACS\0202 MWA PM\Meeting Minutes 2004\Meeting Minutes 12-09-04.doc

**Weekly Oversight Summary Report No. 198**  
**ACS Superfund Site WA57, 46526.238**

**Reporting Period:** Week of December 13, 2004.

**BVSPC O/S Dates:** Cancelled because of limited site activities.

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	1	Respondent's General Contractor
Austgen	1	General Contractor

**Construction Activities**

**Major Activities:**

- Montgomery Watson Harza continued operating the groundwater treatment plant, the in-situ soil vapor extraction systems, and the air sparge systems.

**Activities Performed:**

Montgomery Watson Harza (MWH) reported that it continued to operate the groundwater treatment plant (GWTP) at 25 gpm and that the reactivated sludge clarifier rake operated satisfactorily. MWH reported that water was pumped to the GWTP from all available sources.

MWH continued to operate the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) and Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) systems, processing vapors through thermal oxidizers 1 and 2. Vapors from the ONCA SBPA ISVE system were processed through thermal oxidizer 1 (thermox 1), and those from the OFCA ISVE system were processed through thermox 2.

MWH reported that it was pulling vapors from 28 OFCA ISVE wells and that the two OFCA blowers are currently pumping vapors at 2,000 cubic feet per minute (cfm) back to thermox 2. MWH reported that it was pulling vapors from 14<sup>1</sup> ONCA SBPA ISVE wells, although significant flow was observed in only five of these activated wells. This system continues to operate at 1,000 cfm (with zero ambient air), pumping vapors back to thermox 1.

MWH reported that the air sparge systems continued to operate satisfactorily.

**Topics of Concern:** None.

**Concern Resolution:** None.

---

<sup>1</sup>Previous reports had incorrectly identified that vapors were being pulled from 12 SBPA ISVE wells. Actually, vapors have been pulled from 14 SBPA ISVE wells for a number of months.

**Upcoming Activities:**

- MWH to continue proving out the ONCA SBPA ISVE system wells.
- MWH to continue operating the GWTP and the OFCA and ONCA SBPA ISVE and air sparge systems.
- MWH to assess results of final laboratory testing of cores of the SBPA final asphalt cover.
- MWH to complete fencing of the SBPA final cover.
- MWH to collect additional soil gas samples to assess possible soil vapor intrusion into the house basement resulting from the smear zone in the South Area plume.
- MWH to reassess its approach to completing the lower aquifer investigation.
- MWH to contact local resident regarding “whining” noise from the treatment system.
- MWH to measure site water levels onsite and in monitoring wells.

Signature: Larry Campbell

Date: December 22, 2004

*t:\projects\acs-raos\osr\2004\12\1213#198.wpd*

**Weekly Oversight Summary Report No. 199**  
**ACS Superfund Site WA57, 46526.238**

**Reporting Period:** Week of December 20, 2004.

**BVSPC O/S Dates:** December 23, 2004 (Mr. Campbell)

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	2	Respondent's General Contractor
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Austgen	1	General Contractor

**Construction Activities**

**Major Activities:**

- Montgomery Watson Harza continued operating the groundwater treatment plant, the in-situ soil vapor extraction systems, and the air sparge systems.
- Montgomery Watson Harza measured water levels and assessed performance of the in-site soil vapor extraction system.
- Montgomery Watson Harza met with local residents regarding the "whining" noise coming from the GWTP.
- Montgomery Watson Harza conducted a construction coordination meeting at the site on December 23.

**Activities Performed:**

Montgomery Watson Harza (MWH) reported that it continued to operate the groundwater treatment plant (GWTP) at 25 gpm and that the reactivated sludge clarifier rake operated satisfactorily. MWH reported that water was pumped to the GWTP from all available sources.

MWH continued to operate the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) and Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) systems, processing vapors through thermal oxidizers 1 and 2. Vapors from the ONCA SBPA ISVE system were processed through thermal oxidizer 1 (thermox 1), and those from the OFCA ISVE system were processed through thermox 2.

MWH reported that it was pulling vapors from 28 OFCA ISVE wells and that the two OFCA blowers are currently pumping vapors at 2,000 cubic feet per minute (cfm) back to thermox 2. MWH reported that it was now pulling vapors from 14<sup>1</sup> ONCA SBPA ISVE wells, although

---

<sup>1</sup>Previous reports had incorrectly identified that vapors were being pulled from 12 SBPA ISVE wells. Actually, vapors have been pulled from 14 SBPA ISVE wells for a number of months.



significant flow was observed in only eight of these activated wells. This system continues to operate at 1,000 cfm (with zero ambient air), pumping vapors back to thermox 1.

MWH reported that the air sparge systems continued to operate satisfactorily.

MWH reported that it measured groundwater levels in wells at the site on December 21. Water levels in the SBPA continued to be higher than desired, possibly impacting the vapor flow from ISVE wells.

MWH reported that additional SBPA fence stanchions had been delivered to the site and the bases would soon be filled with cement grout and then deployed on the SBPA cover.

MWH reported that it had contacted the owner of the 1002 Reder Road residence and informed him of the March 2005 date of the second round of ChemOx injections.

MWH reported that the results of the residential well sampling in September 2004 identified trace amounts of DDT in one well. EPA suggested and MWH agreed to resample this well in January 2005.

MWH and Black & Veatch Special Projects Corp. (BVSPC) personnel met on December 23 with Howard Anderson and Donna Gonzalez, residents living less than a mile west of the GWTP, regarding the "whining" noise coming from the GWTP. Concluded the noise was probably that from the external air blowers. MWH agreed to assess acoustical containment of these blowers to reduce the noise and to inform the residents of its plans.

MWH held a construction coordination meeting at the site on December 23, 2004. BVSPC attended this meeting.

**Topics of Concern:** None.

**Concern Resolution:** MWH met with local residents regarding the "whining" noise coming from the GWTP and agreed to investigate methods to minimize the off-site noise level.

**Upcoming Activities:**

- MWH to continue proving out the ONCA SBPA ISVE system wells.
- MWH to continue operating the GWTP and the OFCA and ONCA SBPA ISVE and air sparge systems.
- MWH to assess results of final laboratory testing of cores of the SBPA final asphalt cover.
- MWH to complete fencing of the SBPA final cover.
- MWH to collect additional soil gas samples to assess possible soil vapor intrusion into the house basement resulting from the smear zone in the South Area plume.
- MWH to reassess its approach to completing the lower aquifer investigation.

Signature: Larry Campbell

Date: January 3, 2004

*t:\projects\acs-raos\osr\2004\12\1220#199.wpd*

**WEEKLY CONSTRUCTION MEETING MINUTES  
FOR DECEMBER 23, 2004 MEETING  
AMERICAN CHEMICAL SERVICE, NPL SITE  
GRIFFITH, INDIANA**

**MEETING DATE:** Thursday, December 23, 2004

**MEETING TIME:** 10:00 AM

**MEETING LOCATION:** ACS Site

**ATTENDEES:** Kevin Adler – USEPA (via telephone)  
Pete Vagt – MWH  
Larry Campbell – BVSPC  
Todd Lewis - MWH  
Rob Adams – MWH (via telephone)  
Lee Orosz - MWH  
Amy Clorc – MWH

**TOPICS**

Health and Safety Summary

There have been no health and safety issues since the last meeting on December 9<sup>th</sup>.

Austgen Electric was on site in the past two weeks performing routine maintenance and had no health and safety incidents. On December 21<sup>st</sup>, MWH was on site performing PSVP monitoring and groundwater level monitoring and had no health and safety incidents.

Groundwater Treatment Plant (GWTP) Status

The GWTP is presently operating at approximately 25 gallons per minute (gpm). There has been no down time of the GWTP since the last meeting on December 9<sup>th</sup>.

On December 6<sup>th</sup>, Lee Orosz observed that the center sludge rake in the activated sludge clarifier was not moving. The GWTP was taken offline and the liquid in the clarifier was pumped down on December 7<sup>th</sup> and 8<sup>th</sup> to allow for inspection of the rake. On December 9<sup>th</sup>, MWH found that a piece of angle iron approximately one foot long had become lodged in the rake assembly preventing it from functioning properly. The obstruction was removed. MWH has not identified the source of the angle iron. The GWTP and ISVE system was put back online on December 9<sup>th</sup>.

Off-Site Area/SBPA ISVE Systems

Thermal Oxidizer 1 (Therm-Ox 1) is currently treating vapors from the Still Bottoms Pond Area (SBPA). The SBPA ISVE system is currently operating with a vapor collection rate of approximately 1,000 cubic feet per minute (CFM). There were no changes in which of the SBPA ISVE system wells are operating. Fourteen wells are currently operating; eight show measurable flow. The water levels in the wells are still high in the area. MWH is currently evaluating options for removing the water from the SVE piping to increase the flow.

Thermal Oxidizer 2 (Therm-Ox 2) is currently treating vapors from the Off-Site Area and aeration tank T-102 with a vapor collection rate of approximately 2,000 CFM. Twenty-eight wells are currently operating in the Off-Site Area. MWH is evaluating the potential to enhance performance by changing which wells are operating or increasing the number of active wells to increase the productivity of the SVE flow.

#### SBPA Final Cover

The additional fence posts needed to expand the yellow fencing system in the SBPA have been delivered to the site. The base-plates for the posts will be filled with concrete at the beginning of next week and the new fence configuration is estimated to be complete within the next two weeks.

MWH anticipates submitting the SBPA Final Cover Construction Completion Report in January 2005.

#### Lower Aquifer Investigation

MWH is currently validating the analytical results from the Lower Aquifer Investigation. A report detailing the findings of this investigation and proposing an additional follow-up investigation is anticipated to be submitted in January 2005.

#### Chemical Oxidation Treatment

MWH has contacted the property owner of the residence at the corner of Colfax Avenue and Reder Road to inform him of the March 2005 plans for a second round of Chem Ox injections.

#### Groundwater and Residential Well Sampling

MWH has evaluated the results from the groundwater sampling activities completed in September 2004. Trace amounts of DDT was indicated in the sample for one residential well. The resident informed MWH that they had used bleach to improve well performance earlier this year (prior to the MWH sampling event). DDT has not previously been detected in this well and is not thought to be related to the ACS Site. Upon suggestion by the EPA, MWH will resample the residential well for pesticides in early January 2005. The EPA will contact the resident to inform them of the findings and explain the next steps.

The groundwater report from the September 2004 sampling event was sent to the Agencies on December 23<sup>rd</sup>.

#### Site Noise Investigation

MWH recently received a complaint from a local resident on the noise, which he believes to be produced by the GWTP. Peter Vagt will meet with the resident on December 23<sup>rd</sup> to determine the specific source of the noise. MWH is prepared to look into acoustical enclosures or other means of noise dilution if necessary.

Look Ahead Schedule

December 24, 2004 through January 13, 2005	<ul style="list-style-type: none"><li>• Operate and maintain the GWTP/BWES/PGCS (on-going)</li><li>• Operate and maintain the ISVE (on-going)</li><li>• Pour concrete into base of yellow fence posts (TBD)</li><li>• Lower Aquifer Investigation report (January 2005)</li><li>• CCR for the SBPA Final Cover (January 2005)</li></ul>
Health and Safety Items to Monitor	<ul style="list-style-type: none"><li>• Routine daily tailgate health and safety meetings for all work activities</li><li>• Continued air monitoring in GWTP</li><li>• Monitor areas for icy conditions and apply salt where necessary</li><li>• Monitor weather conditions in advance of work scheduled outdoors so that workers can dress appropriately</li></ul>

Next Construction Meeting – Thursday, January 13, 2005, 10 AM.

ALCP IV

J:\209\601 ACS\2002 MWA PM\Meeting Minutes 2004\Meeting Minutes 12-23-04.doc

**Weekly Oversight Summary Report No. 200**  
**ACS Superfund Site WA57, 46526.238**

**Reporting Period:** Week of December 27, 2004.

**BVSPC O/S Dates:** Cancelled because of limited site activities.

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	1	Respondent's General Contractor
Austgen	1	General Contractor

**Construction Activities**

**Major Activities:**

- Montgomery Watson Harza continued operating the groundwater treatment plant, the in-situ soil vapor extraction systems, and the air sparge systems.

**Activities Performed:**

Montgomery Watson Harza (MWH) reported that it continued to operate the groundwater treatment plant (GWTP) at 25 gpm and that the reactivated sludge clarifier rake operated satisfactorily. MWH reported that water was pumped to the GWTP from all available sources.

MWH continued to operate the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) and Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) systems, processing vapors through thermal oxidizers 1 and 2. Vapors from the ONCA SBPA ISVE system were processed through thermal oxidizer 1 (thermox 1), and those from the OFCA ISVE system were processed through thermox 2.

MWH reported that it was pulling vapors from 28 OFCA ISVE wells and that the two OFCA blowers are currently pumping vapors at 2,000 cubic feet per minute (cfm) back to thermox 2. MWH reported that it was now pulling vapors from 14<sup>1</sup> ONCA SBPA ISVE wells, although significant flow was observed in only eight of these activated wells. This system continues to operate at 1,000 cfm (with zero ambient air), pumping vapors back to thermox 1.

MWH reported that the air sparge systems continued to operate satisfactorily.

**Topics of Concern:** None.

**Concern Resolution:** None.

---

<sup>1</sup>Previous reports had incorrectly identified that vapors were being pulled from 12 SBPA ISVE wells. Actually, vapors have been pulled from 14 SBPA ISVE wells for a number of months.

**Upcoming Activities:**

- MWH to continue proving out the ONCA SBPA ISVE system wells.
- MWH to continue operating the GWTP and the OFCA and ONCA SBPA ISVE and air sparge systems.
- MWH to assess results of final laboratory testing of cores of the SBPA final asphalt cover.
- MWH to complete fencing of the SBPA final cover.
- MWH to collect additional soil gas samples to assess possible soil vapor intrusion into the house basement resulting from the smear zone in the South Area plume.
- MWH to reassess its approach to completing the lower aquifer investigation.

Signature: Larry Campbell

Date: January 4, 2004

*t:\projects\acs-raos\osr\2004\12\1227#200.wpd*

(104)

7 Dec 04

1000 Arrive onsite overcast  
 rain calm 47°F  
 Personnel Onsite  
 Lee Crossy MuH  
 Tim Kirkland Austgen  
 J.T. Tyorasz Eagle Services  
 Robt Gordon "  
 Joe Vusack "  
 Larry Campbell BUSA

1010 Lee Crossy told LMC that rotating rake in biotank had stopped rotating last Friday. So GWTP plant was shut down so MuH could pump out water from center well of biotank. Eagle Services is onsite to pump out sludge from biotank and see if any object is blocking rake rotation. While GWTP is down, MuH is cleaning various process tanks in GWTP.

1020 Observed Tim (Austgen) washing down sludge in ~~Sanborn~~ biotank clarifier ME5.

Jim Campbell

(105)

1125 Austgen remaining across dock from tank T2 to be able to remove sludge  
 Photo 71-01 - Looking NW  
 1140 Photo 71-02 Looking NW showing Lee washing down sludge from access hatch from T2  
 1145 Photo 71-03 Looking NW into T2 showing sludge being pumped out  
 1315 Photo 71-04 Looking into T2 at Eagle Services Tech. pumping out sludge + he's wearing respirator. This is a permitted confined space entry  
 1350 Photo 71-05 Looking down into biotank clarifier showing sump pumps assisting in removing water from clarifier  
 1405 Photo 71-06 Looking NW into T2 after sludge had been removed.  
 1420 Lee said bladders had been onsite last week to insulate the OFC Ablower shed  
 1435 Left site for day

Jim Campbell

(106)

9 Dec 04  
1000 Construction Coord Mtg (Phone)

Attendees:

@ Site: Lee Orosz - MWH

Prabhu Kar Kesava Reddy - IDEM

@ MWH Air Mgr: Joe Pate Vugt, Rob Adams, Chad Smith, Matt Marsarik

@ Phone: K. Adlon - EPC

Larry Campbell BVAPE

HAS - No issues since last mtg. Had number of contractors site recently but no problems.

Eagle Services onsite to clean sludge from interior of clarifier and Vactor Tank - they required a permit ~~and filled the~~ confined entry.

Proper procedures w/ permit + ~~the~~ ~~permit~~ permit, PPE, + air sampling were followed.

GWTP ON Nov 25 power outage (one leg of 3-phase service) and all unit shut down. Many blown fuses & circuit breakers. Back online Friday 11/26. Has been running at 25 gpm since 11/26 till 12/6 when valve in Wiotank

Jim Campbell

(107)

stopped rotating. Started pumping out liquid from clarifier well on Monday. Eagle Services onsite Tues - they pumping out sludge from clarifier. Found angle iron in drain trap - may have caused rotation stoppage. Lee to evaluate later today. If valve will rotate, will restart GWTP today. Access into clarifier well was a permitted confined space entry.

### Thermox Units

Both units have been operating well since last mtg. MWH shut both down Tues 12/7 because exhaust from units was blowing over clarifier - making unsafe work area for Eagle Services. They are in hot idle until clarifier work is done + they can be restarted.

GWTP Tanks - because plant was down, MWH opened tanks - Lamella clarifier # ME05 and Tank T2 Eagle Services made confined space entry into T2. All done OK.

Jim Campbell



108

Air Sparge systems were started on 12/2 in both OFCA & SBPA & Leeward Well.

ISVE Systems -

OFCA - On 11/24, MWH constructed 14 additional ISVE wells in OFCA. New wells are SVE 1, 7, 8, 9, 14, 15, 18, 21, 27, 30, 31, 33, 36, & 37. Now total of 28 wells in OFCA immediately got good flow from 11 of 14 wells. Continue to work on other 3 wells.

- On 11/23, Marbar Insulation was onsite to spray insulation on walls & ceiling of auxiliary blower shed in OFCA.

ONCA-SBPA

Still drawing vapors from same 14 wells but have noticed significantly decreased flow from 9 wells. MWH has noted that water levels in SBPA have risen recently which may decrease the available slt + area for SVE wells for vapors.

Jim Campbell

109

MWH will assess options to increase vapor flow - possibly switch to different wells.

- MWH has not removed product from SBPA wells for > 2 months - not enough to pump. Will assess volume at end of Dec when measurements are made.

SBPA Final Cover - MWH will

expand the area of fencing around SVE wells to minimize areas for heavy truck traffic. When new yellow posts arrive MWH will fill their bases w/ concrete to provide adequate stability to remain upright in winds.

- MWH received final deliverables from Walsh & Kelly so they can complete the CCR for SBPA cover. Expect to submit in week of Jan 18, 05.

Chemox Treatment

MWH has received the Post Application 2 analytical results and found many decreases in concentrations for various types of chemicals. For example: ATTW01 the GRO

Jim Campbell

(110)

decreased from 18,000 ppm to 39,000 ppm. Expect to conduct next application in March 05 (rather than Feb - can't inject in freezing weather).

### Soil Gas Sampling

Additional sampling plan being developed at Residence at 1002 Reder Road.

### GW Monitoring

Analytical results for Sept sampling are completed. GW Monitoring report will be submitted to agencies in late Dec.

- Res. well data is out to residents
- Compaction had fewer lat problems
- Next sampling in Mar 05

Lower Aquifer - data are being validated. Then will prepare report & proposal for next phase of investigation. Will submit in January. Conduct add'l work in Spring 05

- must get approval from City to dispose of LA invest. Soil

Tom Campbell

(111)

Cuttings along w/ sludge from GWTP. Will consolidate into one roll-off box + ship offsite w/i 2 wks.

### Look Ahead Schedule

- Continue to operate GWTP
- " " " " ISVE Systems
- " " " " Air Sparge Systems
- Install SBPA fencing
- Measure water levels next wk
- Sample & EK performance of ISVE wells Christmas week
- Submit Rpt for Semiannual GW Sampling (Sept) in late Dec

Next Mtg. Thurs Dec 23 @ 10 AM

Mtg over @ 10:35 AM

Tom Campbell

(112)

23 Dec 04

0930 Arrive Onsite Clear,  
Calm, Cold 13°F  
Personnel Onsite

Lee Orszag MWH  
Tim Kirkland Austgen  
Peter Vagt MWH  
Larry Campbell BUSE

1000 See mtg notes on pg 113-115

1107 Photo 71-07 Looking S  
at Lee Orszag giving H&S  
briefing of local residents  
concerned about noise from  
GWTP blowers.

• Howard Anderson

• Donna Gonzalez

1114 Photo 71-08 Looking W  
at residents looking at blowers

\* 4 GWTP 10 pm

1155 Photo 71-09 Looking E at  
Snow cover H&S plant

1200 Left Site for day  
\* 1150 Photo 71-09 Looking N showing  
Lee and onsite truck in  
winter head ornament

*Jm Campbell*

(113)

1000 Construction Coord. Mtg.

### Attendees

At Site: Pete Vagt, Lee Orszag - MWH  
Larry Campbell - BUSE  
Via Phone: Rob Adams, Todd Lewis,  
Amy Clark - MWH  
Kevin Adler - USEPA

H&S - No issues since last mtg.

GWTP - running at 25 gpm - No  
shut down since last mtg. No  
major maint. activity. Pumping  
from all avail. sources. ON Dec 9  
MWH & Eagle Services found a  
short (1) angle caused in the  
rake assembly of the <sup>fine</sup> ~~sludge~~ clarifier.  
MWH removed angle & resumed  
operation of blowers on Dec 9.  
Source of angle has not been identified.

15VE Systems - Both Systems operating  
OK.

OFCA System pumping from 28 3VE  
wells, pulling  $\approx 2000$  cfm & processing  
thru Thermox 2. MWH may revise  
well head collection to increase mass  
flow thru system.

*Jm Campbell*

(114)

ONCOT SBPA pulling 1000 CFM from 14 wells - but only 8 have flow - there is water in some SUE wells and some conveyance piping. Processing vapors thru Thermax 1

SBPA Final Cover - MWH expects to issue report in mid January. For the fencing standards MWH has removed sand from ~~potholes~~ <sup>the</sup> bases & will fill w/ cement grout next week.

Chemox Treatment - WORTH Reapply in March 2005. Have noted significant decreases in contaminant concentrations.

Lower Aquifer Investigation - MWH expects to finalize report ~~summary~~ summary & propose new plan in Spring. May install monitoring wells using ~~the~~ <sup>the</sup> Rotasonic rig.

Residential Well Sampling - Trace amounts of DDT were found in well BW-A. MWH will resample in Jan. Noise issue - MWH met w/ local residents re noise from blowers - May shut off them

(115)

to reduce noise.

#### Look Ahead

- Continue to operate GPVTP, ISUE, AS Systems
- Complete SBPA Fencing
- Complete Lower Aquifer Report
- Submit SBPA Final Cover CCR

#### Safety Look Ahead

- Watch for cold temp & snow & icy conditions

Next Mtg Jan 13, 2005 @ 10 AM

Mtg over @ 10:30 AM

*[Signature]*



Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 71 Photo #1

Date: 12-07-04 Time: 1125

Photographer: Larry Campbell

Description: Photo facing northwest showing Austgen removing access cover from tank T2 to be able to remove sludge from interior.

Site: American Chemical Service, Inc.

Proj. #: 46526

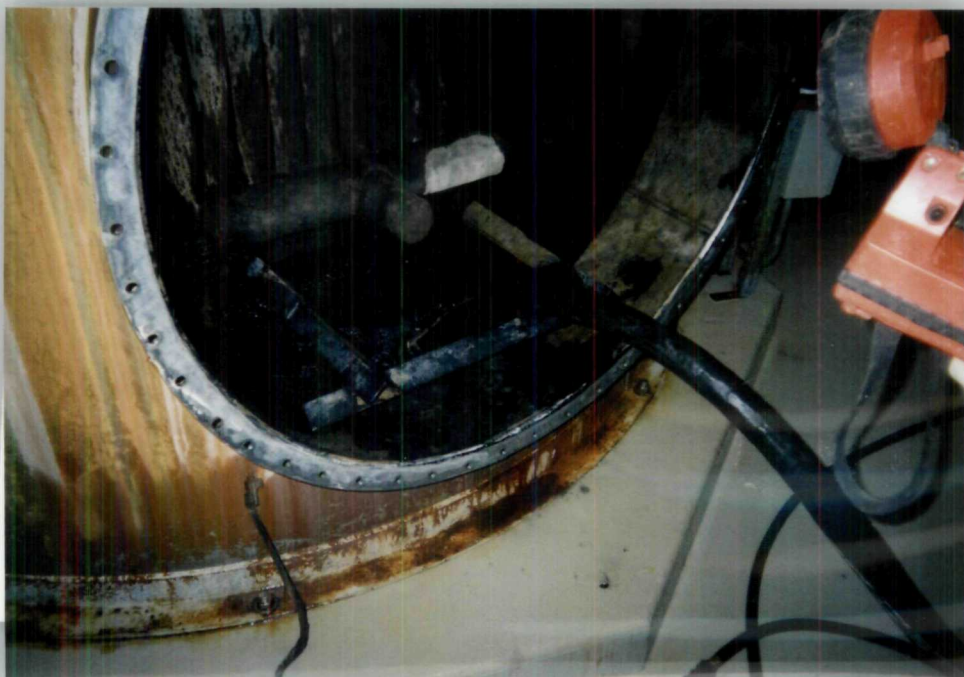
Roll: 71 Photo #2

Date: 12-07-04 Time: 1140

Photographer: Larry Campbell

Description: Photo facing northwest showing Lee Orosz washing down sludge from the access cover from tank T2.





Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 71 Photo #3

Date: 12-07-04 Time: 1145

Photographer: Larry Campbell

Description: Photo facing northwest looking into tank  
T2 showing sludge being pumped out.  
Note heat exchanger inside tank.



Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 71 Photo #4

Date: 12-07-04 Time: 1315

Photographer: Larry Campbell

Description: Photo facing northwest looking into tank  
T2 showing Eagle Services technician  
pumping out sludge. This is a permitted  
confined space entry.



Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 71 Photo #5

Date: 12-07-04 Time: 1350

Photographer: Larry Campbell

Description: Photo facing down into biotank clarifier showing sump pumps assisting in removing water from clarifier.



Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 71 Photo #6

Date: 12-07-04 Time: 1405

Photographer: Larry Campbell

Description: Photo facing northwest looking into tank T2 after sludge has been removed.





Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 71 Photo #7

Date: 12-23-04 Time: 1107

Photographer: Larry Campbell

Description: Photo facing south showing Lee Orosz giving a health and safety briefing to local residents concerned about noise from the GWTP blowers.



Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 71 Photo #8

Date: 12-23-04 Time: 1114

Photographer: Larry Campbell

Description: Photo facing west showing residents looking at blowers at GWTP.





Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 71 Photo #9

Date: 12-23-05 Time: 1150

Photographer: Larry Campbell

Description: Photo facing north showing Lee and onsite vehicle with new winter hood ornament.



Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 71 Photo #10

Date: 12-23-04 Time: 1155

Photographer: Larry Campbell

Description: Photo facing east showing snow covered ACS plant.